Building Nations Through Shared Experiences: Evidence from African Football*

Emilio Depetris-Chauvin† Ruben Durante‡ Filipe Campante§

September 2019

ABSTRACT

We examine whether shared collective experiences help build a national identity, by looking at the impact of national football teams' victories in sub-Saharan Africa. We find that individuals surveyed in the days after an important victory of their country's national team are 37% less likely to identify primarily with their ethnic group, and 30% more likely to trust other ethnicities, than those interviewed just before. Crucially, national team achievements also reduce violence: countries that (barely) qualified to the Africa Cup of Nations experience less civil conflict (9% fewer episodes) in the following months than countries that (barely) did not.

Keywords: Nation-Building, Ethnic identity, Conflict, Trust, Football, Africa
JEL codes: Z290, O120

*We thank three anonymous referees for many helpful suggestions, as well as Alberto Alesina, Sam Bazzi, Francesco Drago, Leopoldo Fergusson, Matthieu Couttenier, Quoc-Anh Do, Marcel Fafchamps, Ignacio Munyo, Jeff Staton, Wolfgang Stojetz, Jorge Tovar, Oliver Vanden Eynde, Joachim Voth, David Yanagizawa-Drott, Ekaterina Zhuravskaya, and especially Leonard Wantchekon for insightful comments. We also thank audiences at numerous seminars and conferences for comments. Christine Cai, Florin Cucu, Carlos Molina Guerra, Sebastian Melo, Francisco Eslava, José Miguel Pascual, and Catalina Morales, provided excellent research assistance. Emilio Depetris-Chauvin acknowledges financial support from CONICYT, FONDECYT Iniciación 11160290.

†Instituto de Economía, Pontificia Universidad Católica de Chile. Email: edepetris@uc.cl
‡ICREA, Universitat Pompeu Fabra, Barcelona GSE, IPEG, and CEPR. E-mail: ruben.durante@upf.edu
§Johns Hopkins University and NBER. E-mail: fcampante@jhu.edu

"What has made sport so uniquely effective a medium for inculcating national feelings [...] is the ease with which even the least political or public individuals can identify with the nation as symbolized by young persons excelling [...]. The imagined community of millions seems more real as a team of eleven named people. The individual, even the one who only cheers, becomes a symbol of his nation himself."

Eric Hobsbawm (1990, p.143)

1. INTRODUCTION

Few things stir national passions as much as sports, and from Hitler to Mandela, political leaders have frequently tried to harness that power to strengthen national identities (Hobsbawm, 1990; Allison, 2000; Carlin, 2008; Hilton, 2011). Yet there is little empirical evidence as to how effective shared experiences such as those created by sporting achievements are, when it comes to nation-building.

This paper studies this question, focusing on the impact of association football (henceforth "football") in Sub-Saharan Africa, by investigating the impact of national football team performance in major international competitions. Football is perhaps the one sport most associated with nationalistic fervor around the world, and the Sub-Saharan African context is one in which nation-building, and the tension between particular versus national identities, are especially salient (Miguel, 2004).[1]

In this context, we find evidence confirming the intuition regarding the nation-building power of sports: national football team success weakens ethnic identification, as opposed to national identity, improves attitudes towards other ethnicities, and reduces actual inter-ethnic violence.

For our first set of findings, we match data from five waves of the Afrobarometer survey with information on 69 official matches involving African teams between 2002 and 2015, covering over 37,000 respondents in 25 countries. We exploit plausibly exogenous differences in the timing of the interviews relative to the timing of the matches, by comparing self-reported

[1] We use the term "football," as opposed to "soccer," in deference to how the sport is commonly known in Africa. Interest in football in Africa is exceptionally high by international standards: the survey data from the *World Football* report (Repucom, 2014) (available from Nielsen Sports) indicates that 75% of respondents in Africa report being interested in football, against a 46% global average. Sports in general, and football in particular, has traditionally played a key role in nation-building in Africa (Darby, 2002), as illustrated by examples such as the historical qualification of the Ivory Coast to the 2006 FIFA World Cup, or the unexpected success of the South African national rugby team in the 1995 Rugby World Cup (Carlin, 2008). Outside of Africa, other cases of sports victories that spurred great patriotic fervor and primed national unity over racial and regional cleavages include the surprising victory of the U.S. ice hockey team against the USSR in the 1980 Winter Olympics (the so-called "Miracle on Ice"), and the success of France and Spain in the 1998 and the 2010 editions of the FIFA World Cup, respectively.

attitudes between individuals interviewed in the days immediately before a match of their national team and individuals with the same ethnic background and in the same country, but interviewed in the days immediately after that same match.

We find that individuals interviewed after a national team match are less likely to report a strong sense of ethnic identity than those interviewed just before the match. This is entirely driven by national team victories, whereas defeats have no discernible impact on that self-identification, suggesting that the experience of success is what galvanizes supporters and tilts the balance between ethnic and national identity in favor of the latter.[2] The effect of victories is over 5 percentage points – which is sizable, as it corresponds to a 37% decrease in the average probability of ethnic self-identification – and quite persistent within the limited time window for which data are available (i.e., up to 30 days before and after the match), becoming even larger several days after the match.

Post-victory respondents are also significantly more likely to trust and interact with members of other ethnicities – an increase which is not matched, quantitatively, by increased dislike of foreigners. Crucially, respondents' lower emphasis on ethnic identity and higher trust in others do not merely reflect a generally positive mood due to post-victory euphoria. In fact, we find no effect of national team's victories on either trust in the ruling party or approval for the incumbent – a result which suggests that politicians' effort to use national teams' achievements to boost their own popularity may not pay off – nor on respondents' optimism about their own or the country's economic prospects.

For our second key set of findings,we combine the football data with data on the occurrence and severity of political violence events, available from the Armed Conflict Location & Event Data Project (ACLED) for the period 1997-2015. Our approach exploits the quasi-randomness of qualification to the final tournament of the Africa Cup of Nations (ACN) for teams that, prior to the last round of group stage matches, could still qualify: for each two teams in the same group that, going into the very last round of matches, could still qualify, we attribute the one that actually qualified to the treatment group, and the one that barely failed to do so to the control group.

We find that countries whose teams (barely) qualified to the ACN tournament experience significantly less ethnic conflict in the following six months than countries whose teams (barely) did not. This effect is sizable, significant, and appears to be quite persistent, lasting up to several months after the event.

[2] This seems consistent with the social psychology literature on success/failure attributional bias, whereby people tend to internalize success and externalize failure (Miller and Ross, 1975; Wann and Dolan, 1994). Relatedly, Heere et al. (2013) interview South African individuals before and after the realization of the 2010 FIFA World Cup in that country, and find no evidence of a change in national vs ethnic identification, though the same authors (Heere et al., 2016) find that there is a decrease in the impact of ethnic identity on social cohesion.

A number of additional results shed light on the mechanism behind these key effects. First, there is a central role for the experience of national team success: the impact on ethnic identification is driven only by victories in high-stakes official games (i.e., Africa Cup of Nations and FIFA World Cup qualifiers and finals), as opposed to friendly matches; the effect is substantially larger for victories against traditional rivals, which are likely to trigger a stronger emotional reaction; and it is similar for wins in home and in away games, indicating that it is not driven by direct participation in the event.

Second, there is evidence suggesting a "role model" mechanism, whereby victories showcase how inter-ethnic cooperation can lead to achievement against a foreign opposing group: the effect of victories is stronger the more diverse the ethnic composition of the national team. In addition, there seems to be some degree of substitutability between the shared experiences created by national team success and other, more expensive forms of nation-building: the effect is weaker where the state is more present, specifically in ways that might lead to a stronger connection to the nation (roads, post office, schools).

We also find that the effect of national sporting achievement in reducing violence is greater when that achievement is unexpected: it is stronger for teams that had never qualified to the ACN tournament before, or that had not qualified in a long time.[3] In addition, the reduction occurs in areas with politically weak ethnic groups, and with relatively large ethnic diversity, which is where one would expect the issue of national identity to be particularly fraught.

Taken together our findings indicate that shared collective experiences – such as important sporting achievements – can be effective at priming sentiments of national unity and at attenuating even deeply-rooted ethnic mistrust. Moreover, we find that they have tangible effects on the prevalence of conflict. Even if they are transient, our results suggest that they may last long enough to open a precious window of opportunity for political dialogue, negotiations, and reforms capable of producing long-lasting improvements.

Our results shed new light on the mechanisms available for fostering nation-building. This is evidently an important question, as many countries feature strong ethnic, linguistic, or regional cleavages, which can lead to tensions and even outright violence, with detrimental consequences for economic development (Easterly and Levine, 1997; Alesina et al., 1999; Alesina and La Ferrara, 2005; Miguel and Gugerty, 2005). Overcoming such cleavages has long been a crucial challenge in the consolidation of modern states – from 19th century Europe to present-day developing countries and even developed ones (e.g. Spain, Belgium).

[3] Our finding that unexpected results are more consequential than expected ones is in line with previous evidence on the effect of sports events on various outcomes. For example, in their study on the impact of NFL games on intra-household violence, Card and Dahl (2011) find that upset losses are associated with a 10% increase in violence toward female partners while expected ones have no impact. Similarly, Munyo and Rossi (2013) find that upset losses increase violent property crime whereas unexpected victories strongly reduce it, though both effects are extremely short-lived and mainly due to incapacitation.

This has led many countries to adopt policies aimed at forging a common identity, making citizens see themselves as part of the nation as a whole rather than of their specific group, and "feeling a sufficient amount of commonality of interests, goals and preferences [that] they do not wish to separate from each other" (Alesina and Reich, 2015; Alesina et al., 2017).

However, such policies often include the provision of public services – from mass schooling to military conscription, from infrastructure building to resettlement programs (Tilly, 1975; Weber, 1976; Finer, 1975; Ramirez and Boli, 1987; Bandiera et al., 2018; Conversi, 2008; Bel, 2011; Bazzi et al., 2018). This requires a substantial level of state capacity, and, as such, poses a clear conundrum: if internal fractionalization is an obstacle to the consolidation of a capable state, it can itself become a major hurdle for the adoption of policies that could overcome it. On the other end of the spectrum are other "softer" and less tangible nation-building tools involving the use of symbols – such as the national flag or the national anthem – meant to evoke and reinforce national identity. Yet, while such "banal nationalism" (Billig, 1995) may help maintain a national identity that has already been established, it is unlikely to be strong enough to make one emerge.

Our results point at a middle ground between these two extremes: the experiences perceived by the citizens of a country as being collectively shared between them. Indeed, as pointed out by Anderson (1983) in his seminal work on nationalism, nations are fundamentally "imagined communities," and highly symbolic and emotionally charged experiences, such as those created by sporting achievements, can help make the image of the national communion live in each citizen's mind.

Our research contributes to various other streams of literature. First, it relates to previous work on the determinants of ethnic identification which indicates that the strength of ethnic identification may be malleable by factors such as electoral competition, economic modernization, or whether an ethnic group holds power (Eifert et al., 2010; Robinson, 2014; Green, 2017).[4] Yet, due to data limitations and identification issues, it has been difficult for these contributions to go beyond correlations and draw causal conclusions. Our paper fills this gap by providing robust causal evidence that the patriotic sentiments primed by important sporting achievements can affect the strength of ethnic versus national identity. In doing so, we add to the micro-level experimental evidence that sports affiliation can reduce ethnic identification (Kurzban et al., 2001) and favor cross-group integration (Lowe, 2018). We also add to the literature that has shown how shared collective experiences can affect individual attitudes in politically relevant ways (Clingingsmith et al., 2009; Madestam and Yanagizawa-Drott, 2011; Kaplan and Mukand, 2014), which itself builds on a long literature

[4] Berge et al. (2015) find evidence that priming national identity is not very effective in affecting interethnic cooperation, in the context of an experiment in Kenya, though they also find little evidence of ethnic bias in that context in the first place.

in social psychology, going back to Durkheim, that has addressed the emotional impact of collective experiences. As aptly summarized by Paez et al. (2015), "doing things together [has] been demonstrated to enhance self-categorization as a member of a group, sense of union with others, positive affect, and prosocial behavior. (...) When expressed collectively, human feelings intensify."

Our paper also relates to previous work on the determinants of interpersonal trust which has documented how historical episodes had long-lasting effect on contemporary trust attitudes (Nunn and Wantchekon, 2011; Buggle, 2016; Jacob and Tyrell, 2010). Our findings indicate that other, more transitory factors, can also have a substantial impact on trust attitudes, particularly towards people of other ethnicities. In this respect, our results are especially related to recent work by Robinson (2016) who shows that manipulating the salience of national identity in a 'lab-in-the-field" experiment improves inter-ethnic trust, and by Miguel (2004) who argues that nation-building policies can improve inter-ethnic cooperation.

Our work contributes to the vast literature on the determinants of civil conflict, by documenting that sporting achievements associated with national identity can contribute to reducing violence. On a related note, Bertoli (2017) finds an impact of international football on increasing the likelihood of interstate conflict. This is consistent with our findings, in that a stronger national identity may come in opposition to outsiders. We find some evidence of increased animosity towards foreigners in the Afrobarometer data, though not conclusively due to low precision.

The paper is organized as follows: Section 2 introduces the data. Sections 3 and 4 present and discuss the empirical strategy and results for the individual- and country-level analysis, respectively. Section 5 concludes.

2. Data

2.1. National Football Teams' Matches

We collect information on all official matches played by men's national teams of various sub-Saharan African countries over the period 1990-2015; these data are available from the FIFA statistical office (FIFA Statistical Office, 2018). (We disregard countries from the Maghreb region because, for these countries, Afrobarometer surveys did not include questions on ethnic identity.) In particular, we focus on matches played for both the qualifying and the tournament phases of the two most important competitions for African national football teams: the Africa Cup of Nations (ACN) and the FIFA World Cup (WC). For each match we have information on the date, the location, the opponent, the competition, the phase, and the final score. We use the information on the date of the match to combine the data with both the individual survey data and the conflict data described below.

Overall, for the individual-level analysis, we use information from 69 official matches played between 2002 and 2015, for which Afrobarometer surveys were administered within a window of fifteen days before or after each match. Out of our sample of matches, 31 were wins by the respondent's national team, 29 were losses, and 9 were draws, with 22 country-years (out of 57) experiencing at least one victory. We also consider a 30-day window, for robustness, which increases the number of official matches to 85, and collect information on 66 friendly matches over the same period, for a placebo check.

For the country-level conflict analysis, we also collect information on teams' standings in ten ACN qualifying rounds held between 1997 and 2015. In particular, we record all teams' standings before and after the final match of the qualifying stage to identify teams that, prior to the last game, could still qualify to the tournament phase, and, among these, those that eventually did. The full list of countries and years exploited in the analysis is shown in Appendix Table A.1.

2.2. Survey Data on Individual Attitudes

We use individual survey data from the Afrobarometer, a series of nationally representative surveys covering several African countries (Afrobarometer, 2016). Specifically, we use five waves (rounds 2 through 6) of the survey, conducted between 2002 and 2015. Interviews are conducted in the local languages, and questions are standardized so that responses can be compared across countries. Questions are designed to assess respondents' attitudes on a range of issues, including attitudes towards democracy, political actors, markets, and civil society.

For our analysis, we focus on the questions regarding individuals' identification with the nation and with their own ethnic group, and trust in others, particularly in people from other ethnicities. (We exclude round 1 of the Afrobarometer because it did not ask questions comparing ethnic and national identity.) In addition, we also use information on a range of respondents' personal characteristics, with particular regard to the main language spoken at home which, following Eifert et al. (2010), we use as a proxy for ethnic background.[5] Overall, we use data from 57 survey rounds conducted in 25 Sub-Saharan African countries. Our main outcome variable is a measure of ethnic identification, which captures the strength of an individual's ethnic identity relative to national identity. The variable is based on re-

[5] Language is the best proxy for ethnic background available in all the waves of the Afrobarometer we use in our analysis. In fact, the Afrobarometer questionnaires did not include explicit questions about the respondent's ethnicity for its first two rounds. We exclude from our main analysis individuals with unknown language spoken at home. We also exclude those reporting an Indo-European or Arabic language. In Appendix Table A.2 we show that, for the waves for which data on ethnicity are available, our results are analogous if we include ethnic group fixed effects instead of language group fixed effects.

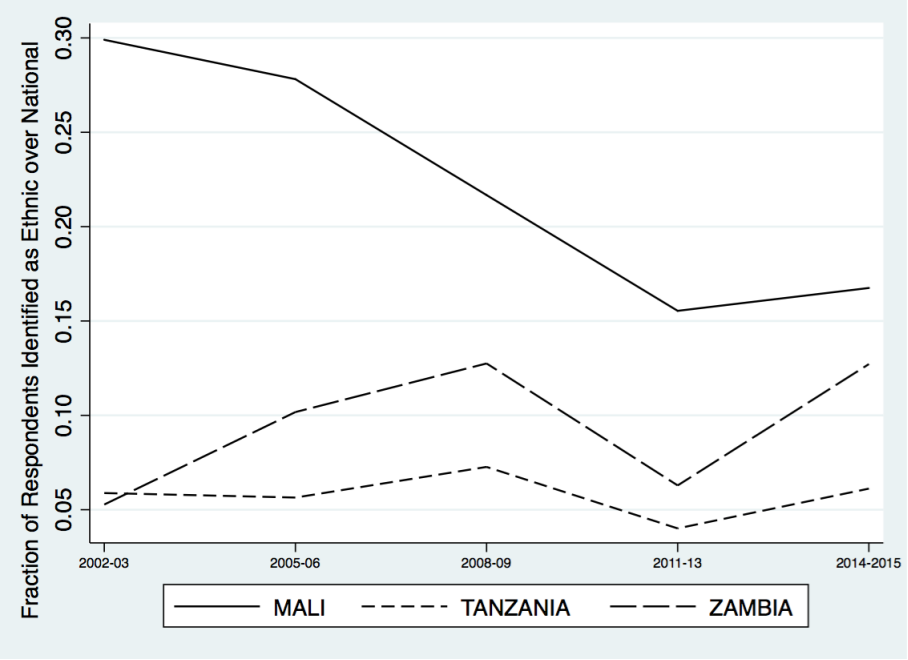
sponses to the following question: *"Let us suppose that you had to choose between being a [National] and being a [respondent's ethnic group]. Which of these two groups do you feel most strongly attached to?"*. Respondents could pick any of the following five options: 0 ("only [National]"), 1 ("more [National] than [Ethnic group]), 2 ("equally [National] and [Ethnic group])", 3 ("more[Ethnic group] than [National]"), and 4 ("only [Ethnic group]"). We construct a binary measure of ethnic identity that takes a value of one for all respondents who report feeling "only ethnic" or "more ethnic than national."[6]

In Figure 1 we plot the share of respondents that reported stronger ethnic than national identity, for a selected group of countries over our sample. (The full list is shown in the Appendix Figure A.1.) We can see that the relative strength of ethnic identity varies considerably across countries, and even in the same country over time, possibly also due to the impact of the type of major sports events we investigate. One suggestive example in this regard is given by Mali, where more than 30 percent of the individuals interviewed in 2002 emphasized ethnic over national identity, but where less than 15% did so in 2013, when the Malian national football team achieved third place in the Africa Cup of Nations, its best performance in the history of the competition. Similarly, the typically high share of Zambians who report a strong sense of ethnic identification was greatly reduced in 2013, a year after the country's historic and unexpected victory in the 2012 ACN. In contrast, the strength of ethnic identity appears to be lower and more stable in a place like Tanzania, which is known for its effective nation-building policies (Miguel, 2004).

To explore the impact of national team's victories on key respondents' attitudes, we use a number of additional variables. First, we use the standard measure of trust ("trust in fellow countrymen"), defined on a 4-point scale from 0 ("not at all") to 3 ("a lot") (This measure is only available in Round 4.) Second, using questions on respondents' trust in people from other ethnic groups (available only in Round 3), we construct a measure of inter-ethnic trust, also defined over the same 4-point scale. Third, we use two questions from Round 6, asking whether respondents would like having people from a certain group as neighbors, focusing on "People from other ethnic groups" and " Immigrants or foreign workers" (answers from 1 "strongly dislike" to 5 "strongly like"), reversing the original order so that 5 means "strongly dislike". Fourth, to assess the effect of national team's victories on support for the government, we code two additional variables: trust in the ruling party (with answers ranging from 0 "not at all" to 3 "a lot") and approval of the president (with answers ranging

[6] We use the binary variable because, in Round 2, the information is obtained in binary fashion. More precisely, the respondent first chooses between "national" and "group" identity, and in the latter case may then choose to declare his/her group identity as "Language/tribe/ethnic group." (Other options in the second question included gender or political party, for instance.) In that case, we code the binary variable as equal to one for all respondents who chose a group identity of the "Language/tribe/ethnic group" type.

FIGURE 1: ETHNIC IDENTIFICATION OVER TIME AND ACROSS SELECTED COUNTRIES



from 1 "strongly disapprove" to 4 "strongly approve"). Finally, to examine whether victories influence respondents' overall mood, we code two measures of respondents' assessment of their current living conditions and of the country's economic situation, as well two measures of how they expect these conditions to evolve in the future.

In all cases, we code dummy variables for our main analysis: depending on the variables, the dummy takes a value of one for "somewhat"/"a lot", "somewhat like"/"strongly like", "somewhat approve"/"strongly approve", "same"/"fairly good"/"very good", "same"/"better"/"much better".

2.3. COUNTRY-LEVEL CONFLICT DATA

To study the impact of national teams' victories on actual violence, in the last part of our analysis we use country-level data on conflict from the Armed Conflict Location and Event Data Project (ACLED). The data, available for the period 1997-2015, include information on the date and location of any episode of political violence - i.e., battles, killings, riots - that involve either the government, rebel groups, militias, or civilians (Raleigh et al., 2010). The data also include information on the severity of the events, measured by the number of associated fatalities. Based on this information we construct three measures of conflict intensity at the country-week level: i) the number of conflict events occurred, ii) a dummy for whether any conflict event occurred, and iii) the number of casualties associated with

these events.

We also construct analogous measures specifically for ethnically-related conflict. Though the ACLED data do not explicitly distinguish between ethnic and non-ethnic conflict, some of the information in the ACLED records can be used to indirectly make this distinction. Specifically, we code as ethnically-relevant conflict events that involve the participation of actors classified as ethnic militia or whose denomination refers to an ethnic faction (e.g. "Bete Ethnic Group"), or any event for which the ACLED records include a specific reference to ethnic tensions as cause of violence. Such procedure is of course vulnerable to substantial measurement error, namely to the risk of coding as non-ethnic episodes that are in fact driven by ethnic motives. Yet, to the extent that it affects the dependent variable and is unrelated to the timing of qualification, measurement error should only reduce the precision of our estimates. According to our classification, about 7.2% of country-week observations in our sample have at least one ethnically-related conflict event.

To shed further light on the potential mechanisms we exploit the information on the spatial location of different conflict episodes. We first link the location of conflict events to the location of ethnic groups surveyed in the Ethnic Power Relations (EPR) dataset (Cederman et al., 2010). The EPR (and its geo-coded version, the GeoEPR 2018 dataset (Wucherpfennig et al., 2011)) provides ethnic-specific information on political representation (or exclusion) in the national government across space and time, and it classifies ethnic groups as politically relevant if "at least one political organization claims to represent it in national politics or if its members are subjected to state-led political discrimination" (Cederman et al., 2010). We distinguish conflict events occurring in areas inhabited by politically strong groups ("monopoly" or "dominant" groups, according to EPR) from those in places inhabited by politically weak ones ("discriminated," "powerless," or "self-excluded"). About 6% and 21% of country-week observations in our sample have at least one conflict event in areas of politically strong and politically weak ethnic groups, respectively.

Finally, we classified conflict events as occurring in areas with high and low ethno-linguistic diversity. To do so, we use the Ethnologue dataset (Lewis, 2009) to compute the number of languages spoken in each (first-level) administrative sub-national unit. We classified as low linguistic diversity (high linguistic diversity) location the sub-national units wherein only one language is (more than 5 different languages are) spoken. About 20% (50%) of the almost 600 first-level sub-national administrative units in Sub-Saharan Africa host only one language (more than 5 languages). According to our classification, about 9% (35%) of country-week observations in our sample have at least one low-diversity (high-diversity) conflict event. Summary statistics for the different measures of conflict used in our analysis are reported in Appendix Tables A.3 and A.4.

3. Individual-Level Analysis: Ethnic Identification and Trust

3.1. Empirical Strategy

Our empirical strategy to estimate the impact of national team performance on individual attitudes is summarized by the following equation:

$$Outcome_{i,e,c,m,d,t} = \alpha + \beta Post_{i,e,c,m,d,t} + \gamma' X_i + \theta_{c,m} + \delta_{e,t} + \lambda' \Lambda_d + \varepsilon_{i,e,c,m,d,t} \quad (1)$$

where i, e, c, m, d, and t denote respectively individual, language group (a proxy for ethnicity), country, match, date of the interview, and year. *Outcome* is one of the attitudinal variables described in the previous section. *Post* is the main regressor of interest, and takes value 1 if the respondent was interviewed in the days after an official match (or victory) of her national team, and 0 otherwise. X_i is a vector of baseline individual controls (i.e., education, gender, age, age squared, unemployment status and an indicator for living in a rural area); θ and δ are country$\times$match and language group$\times$year fixed effects, respectively; Λ_d is a vector of dummies for day of the week, day of the month, and month of the year to which the interview date belongs, to account for possible within-year, -month, or -week patterns in survey responses; ε is an error term.

The presence of country-match fixed effects means that, when estimating equation (1), we identify the effect of *Post* by comparing respondents interviewed after a given match (or victory) of their national team with all other respondents of the same country and language group before that very same match. As for standard errors, we will show results under different clustering approaches, but in our benchmark specifications we cluster by country$\times$year, to be relatively conservative. Also, since we run our econometric model on multiple outcomes and we test multiple heterogeneous effects, we report False Discovery Rate (FDR) adjusted p-values following Anderson (2008).

We mainly focus on the sample of individuals interviewed in the 15 days before and after official matches of their national football team. We consider, in particular, the sample of respondents exposed to only one match, which includes over 37,000 individuals between treatment and control groups.[7] Descriptive statistics are presented in Appendix TableA.5.

[7] We chose a rather tight time window to avoid having the same individual be in the treatment group for one game and in the control group for another one. We later show that our results remain virtually unchanged when replicating the analysis using a larger time window (i.e., 30 days). (Appendix Figure A.2 shows the distribution of interviews in the proximity of the relevant matches.) By the same token, focusing on individuals treated by just one game makes the analysis and the interpretation of the results easier, since it does not require aggregating the potentially contrasting results of subsequent games (e.g. one win followed by one loss). For robustness, we also show that the results are similar when using the larger sample of respondents potentially exposed to one or more matches, which includes more than 45,000 individuals (Appendix Table A.6). In this case the treatment variable is the share of matches won, or the share of available points won. One limitation of looking at the impact of multiple games is that this approach does not allow for the inclusion of country-match fixed-effects.

In particular, 47 percent of the individuals were exposed to a match in the 15 days prior to the interview; of these roughly 42 percent experienced a victory, while 41 percent and 16 percent saw their national team losing and drawing, respectively.

Our identification strategy relies on the quasi-random nature of the date and final result of matches relative to the timing of the Afrobarometer interviews. Hence, our identifying assumption is that national teams' matches did not interfere with the implementation of the survey, nor did victories interfere differently compared to non-victories. Such possibilities seem especially unlikely since, as emphasized by Eifert et al. (2010), the logistics involved in the implementation of the Afrobarometer survey – selection of the enumeration sites, setting up of the field teams etc. – requires many months if not years of preparation, and are hardly related to the occurrence of sports events let alone to their unpredictable result.

To assess the validity of our strategy, we conduct a balance test for several respondent characteristics that may potentially correlate with the timing of the interview and the outcomes of interest. These include: gender, education, age, unemployment status, religious membership, whether the respondent belongs to the country's ethnic majority, whether (s)he lives in a rural area, and whether (s)he lives in an area where basic public goods are available.[8] To control for the possibility of social desirability bias, we also test that several characteristics of the interviewer are not systematically different between treatment and control groups. These include: gender, education, whether the interviewer speaks the same language as the respondent, and whether the interviewer thought anyone influenced the respondent during the interview.[9] We perform two separate balance tests: one comparing individuals interviewed before and after a match, regardless of its outcome, and another comparing individuals interviewed before and after a victory. To ensure that we compare respondents from the same country interviewed around the same match, we regress each variable on either treatment including country-match fixed effects, and cluster standard errors at the same level.

The results are reported in Table 1. Individual characteristics are largely balanced between respondents interviewed before and after the same match (Panel A), as well as when comparing individuals interviewed before and after a victory of the national team (Panel B). The only exceptions (all in Panel B) are education, gender, and rural status. Regarding the first two variables, the differences between treatment and control group are very small: on av-

[8] Evidence suggests that these characteristics can potentially affect ethnic sentiments. For instance, Robinson (2016) shows that urban status, education, gender, and formal employment all positively predict national identification (relative to ethnic). Regarding age, instead, Eifert et al. (2010) find no evidence that young people are more likely to self-identify in ethnic terms.

[9] A large literature argues that interviewers' observable traits such as race, ethnicity, and gender can influence respondent's answers (see West and Blom (2017) for a summary). In particular, using Afrobarometer data Adida et al. (2015) find that respondents give systematically different answers to coethnic and non-coethnic interviewers.

TABLE 1: BALANCE IN COVARIATES

			Panel A: Post-Match		Panel B: Post-Victory	
Covariate	N	Mean	Estimate	Std. Errors	Estimate	Std. Errors
Male	37134	0.50	0.006	0.004	0.009	0.005
Education	37134	3.08	-0.136	0.150	-0.317	0.155
Age	37134	36.9	0.804	0.702	1.534	0.800
Unemployed	37134	0.30	0.000	0.013	-0.003	0.013
Major Ethnicity	37134	0.46	-0.016	0.046	-0.016	0.039
Rural	37134	0.61	0.098	0.074	0.173	0.076
Religious Group Member	37005	0.42	-0.026	0.016	-0.017	0.024
Public Goods	37134	0.48	-0.001	0.020	-0.030	0.017
Same Language	37134	0.47	-0.038	0.032	-0.018	0.042
Influenced By Others	37087	0.05	-0.004	0.006	-0.002	0.008
Male Interviewer	37134	0.56	-0.002	0.011	-0.004	0.017
Education Interviewer	36480	7.11	-0.022	0.046	-0.064	0.057
Age Interviewer	37134	28.6	0.012	0.114	0.147	0.134

Robust standard errors in parentheses clustered at country-match level. Each panel presents point estimates and standard errors for 13 regressions of a covariate (listed at the left) on Post-Game (Panel A) and Post-Victory (Panel B). Post-Match takes value 1 if the respondent was interviewed within 15 days after a game (regardless of the result), 0 otherwise. Post-Victory takes value 1 if the respondent was interviewed within 15 days after a victory, 0 otherwise. All estimates are based on OLS regressions using 69 country-match dummies to ensure that the comparison in the covariates is made between respondents in the proximity of the same game and in the same country.

erage individuals interviewed after a victory were only 0.9 percent more likely to be men than women (p-value: 0.072), and displayed lower educational attainment (p-value: 0.039) by just 15% of a standard deviation (or 10% of its mean value). Regarding rural status, the comparison indicates that individuals in rural areas are somewhat more likely to be interviewed after a victory (p-value: 0.023). Since men, people in rural areas, and less educated people are generally more likely to identify themselves with their ethnicity (in our data, as per Appendix Table A.7, and consistent with Robinson (2014)), gender is the only imbalance that would work in the direction of finding a negative effect of wins on ethnic identification. In any event, in all regressions presented below we control for the entire set of respondents' individual characteristics, though their inclusion does not affect our results.

3.2. RESULTS: NATIONAL TEAM'S VICTORIES AND ETHNIC IDENTIFICATION

In Table 2 we test the empirical relationship between national team performance and ethnic identification on the baseline sample of all respondents within 15 days of just one match. We start off by regressing the dummy for stronger ethnic than national identity on a dummy

for being interviewed after a match, controlling for country-match and language group×year dummies. The inclusion of country-match fixed effects, in particular, allows us to control for all country-level confounds that vary from one match to another, such as political or economic events (e.g., national elections, ethnic conflicts, nation-wide economic policies, yearly variation in commodity prices, etc.).

The result, in column 1, indicates that national team matches have a significant negative effect on the probability of self-identifying with one's own ethnicity as opposed to the country as a whole. The coefficient becomes slightly larger and more significant in columns 2 and 3, where we include the baseline set of individual controls, as well as seasonal fixed effects to deal with the possibility that attitudes may vary over the year.

The collective experience of a national team match therefore affects the likelihood of ethnic identification. What column 4 shows, however, is that it is actually the experience of victory that really weakens ethnic identity. In fact, as can be seen in column 5, drawing or losing a match has no distinct effect. The absence of an effect in the case of defeats is especially interesting, as it suggests that negative collective experiences do not necessarily undermine national unity.[10] Finally, in column 7 we show that the results are qualitatively similar when estimating a non-linear probit model instead of the linear probability model used in the previous columns.

The estimated effect in column 6 is quite large: individuals interviewed after national team's victories are 5.3 percentage points less likely to report a strong sense of ethnic identity than other respondents of the same language group interviewed just before; this corresponds to over a 37% decrease in the average probability of ethnic self-identification.

Next we examine how the effect on ethnic identification evolves in the days after a victory. In Figure 2 we plot the estimated coefficients and 95% confidence intervals for dummies for 3-day periods before and after the victory. The coefficients are estimated from a unique regression in which we control for individual characteristics, seasonal, country×match, and language group×year fixed effects. Since we normalize the coefficient for the three days before the victory to zero, the other coefficients indicate how ethnic identification changes over time relative to the eve of the event. The figure confirms that individuals are less likely to report a strong sense of ethnic identification after a victory of the national team, and indicates that the effect persists and, if anything, becomes stronger several days after the match. In contrast, ethnic identification does not seem to evolve in any particular way in the days prior

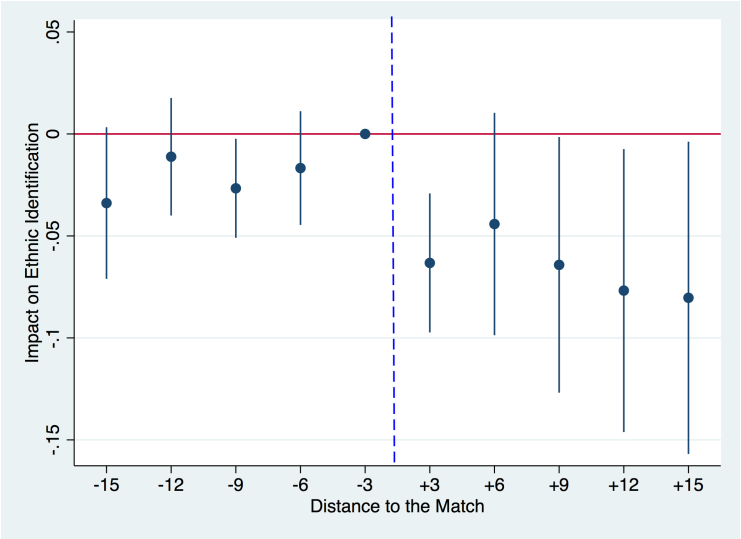
[10] The idea that people tend to internalize success and externalize failure is present in the social psychology literature on success/failure attributional bias (Miller and Ross, 1975). The presence of this type of bias among sports fans specifically is also well-established (Wann and Dolan, 1994), as is the tendency to associate with successful teams (Wann, 2006).

TABLE 2: NATIONAL TEAM'S PERFORMANCE AND ETHNIC IDENTIFICATION

	Dependent Variable: Ethnic over National Identity (0-1 dummy)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	OLS	OLS	OLS	OLS	OLS	OLS	Probit
Post-Match	-0.026	-0.029	-0.036	-0.001			
	(0.012)	(0.014)	(0.014)	(0.016)			
Post-Victory				-0.052	-0.053	-0.053	-0.243
				(0.019)	(0.017)	(0.016)	(0.062)
				[0.010]	[0.010]	[0.010]	
Post-Draw					-0.026		
					(0.039)		
Post-Defeat					-0.000		
					(0.017)		
Post-Victory Marginal Effect							-0.048
							(0.012)
Country × Match FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Language × Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual Controls	No	Yes	Yes	Yes	Yes	Yes	Yes
Seasonal FE	No	No	Yes	Yes	Yes	Yes	Yes
Observations	37,060	37,060	37,060	37,060	37,060	37,060	35,305
R-squared	0.094	0.102	0.104	0.104	0.104	0.104	—

Robust standard errors clustered by country×year in parenthesis. False Discovery Rate (FDR) adjusted p-values for *PostVictory* are reported in square brackets (Anderson, 2008). The outcomes (all dummies) accounted for in the p-value adjustment are: ethnic over national identity, trust in countrymen, inter-ethnic trust, like neighbors from other ethnicities, dislike foreign neighbors, trust ruling party, president's approval, and 4 indicators for the assessment of present and future own and country's economic conditions. Sample includes respondents interviewed within 15 days before and after an official game. *PostGame*, *PostVictory*, $Post-Draw$ and $Post-Defeat$ take value 1 if the respondent was interviewed in the 15 days after a game, a victory, a draw or a loss respectively, and 0 otherwise.

FIGURE 2: ETHNIC IDENTITY BEFORE AND AFTER NATIONAL TEAM'S VICTORIES



The figure plots the coefficients and the 95% confidence intervals for nine dummies indicating 3-day blocks from 15 days before to 15 days after a victory of the national football team. The coefficient for the period between 3 to 1 days before the match is normalized to zero. Confidence intervals are based on heteroskedasticity-robust standard errors clustered by country×year. The coefficients are estimated from a unique regression in which we control for individual characteristics, seasonal dummies, country×match and language group×year fixed effects.

to the match.[11]

3.3. INTERPRETATION

What drives the effect of national team victories on strengthening national identity? To shed light on that question, we first explore what types of victories are more likely to affect the strength of ethnic sentiments. In the first column of Table 3, we look at whether friendly matches affect ethnic identity, and how this compares to the impact of victories in official matches documented above. The results indicate that victories in friendly matches, which typically have a much lower profile and attract relatively little attention, have virtually no effect on ethnic identification. This is consistent with the view that low-stakes games are less effective than high-stakes ones at spurring patriotic fervor.

[11] Our results are robust to a number of specification checks, reported in the Online Appendix. We experiment with: (i) Different levels of clustering and fixed effects combinations (Appendix Table A.8); (ii) Alternative time windows (Appendix Table A.9); (iii) Excluding Afrobarometer waves, countries and matches, one at a time (Figures A.3 and A.4); (iv) Dealing with potentially influential matches (weighing regressions by number of respondents, excluding games with relatively few or many respondents, excluding observations based on their DFBETA) (Appendix Table A.10). It is also robust to using the original five-point measure of ethnic identification (not available in all rounds), when it comes to magnitudes, though with less precision (Appendix Table A.11).

We then test the hypothesis that victories against traditional rivals are more consequential than other victories. To do so, we interact our *PostVictory* variable with an indicator of traditional footballing rivalries.[12] The results show that, though all victories negatively affect ethnic identification, the effect is considerably larger for victories against traditional rivals, which arguably trigger a stronger emotional reaction. While this result is coming from a relatively small number of observations – just under 10% of the sample involves rivalry matches – it is nevertheless consistent with the idea that national identity is strengthened in opposition to a salient foreign outside group.

In column 3 we focus on the heterogeneous effect of victories in matches played at home. The fact that the interaction term is small and not statistically significant, and that *Post-Victory* is still associated with a significant decline in ethnic identification, suggests that the effect is not driven by respondents' direct participation in the event. This underlines the imagined aspect of the shared experiences triggered by national team performance.

In column 4 we examine whether winning by a large margin boosts pride in the national team and reduces ethnic identification even further. To do so, we interact the $Post-Victory$ dummy with a dummy for whether the team won by two goals or more (i.e., the top quintile of the distribution). We find a relatively small coefficient, suggesting that blowouts are not more powerful in terms of shifting identities – perhaps because they are generally indicative of less competitive matches.

In column 5 we examine whether victories in matches with a large number of goals are associated with a larger effect. This exercise allows us to test whether our baseline effect is driven by enthusiasm for witnessing a particularly spectacular game rather than a genuine increase in national pride. Again, we find the interaction to be small and insignificant, thus providing little support for this alternative hypothesis.

We then turn attention to whether certain segments of the population are more responsive to the patriotic influence of national teams' victories. In particular, interacting the dummy *Post-Victory* with various individual characteristics, we test whether the effect is larger for men vs women, for younger vs older cohorts, for more vs. less educated individuals, for people living in rural vs urban areas, and for people belonging to the largest ethnic group in the country. The results, presented in Appendix Table A.7, indicate that none of these

[12] Traditional rivalries in Sub-Saharan Africa are often determined by the existence of a shared border or previous conflict, but others are more specific to the sporting history. Specifically, the set of rivalries we identified is: Benin-Togo, Burkina Faso-Ivory Coast, Cameroon-Egypt,Cameroon-Nigeria, Cape Verde-Guinea-Bissau, Congo DR-Ghana, Congo DR-Rwanda, Ghana-Egypt, Ghana-Ivory Coast, Ghana-Congo DR, Ghana-Nigeria, Guinea-Guinea-Bissau, Ivory Coast-Senegal, Ivory Coast-Mali, Nigeria-Algeria, Senegal-Nigeria, South Africa-Zambia, and Zambia-Zimbabwe. (The list is based on Wikipedia (https://en.wikipedia.org/wiki/List_of_association_football_rivalries#CAF_zone), the Confederation of African Football website (www.cafonline.com) and the news site *Jeune Afrique* (www.jeuneafrique.com).)

TABLE 3: NATIONAL TEAM VICTORIES AND ETHNIC IDENTITY: STAKES AND HETEROGENOUS EFFECTS

	Dependent Variable: Ethnic over National Identity (0-1 dummy)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Post-Victory	0.019	-0.046	-0.054	-0.054	-0.053	-0.052	-0.058	-0.074
	(0.015)	(0.016)	(0.016)	(0.015)	(0.017)	(0.015)	(0.019)	(0.016)
		[0.013]	[0.006]	[0.006]	[0.006]	[0.006]	[0.009]	[0.001]
Interaction		-0.061	0.014	-0.012	0.001	0.049	-0.034	-0.280
		(0.020)	(0.031)	(0.031)	(0.010)	(0.027)	(0.157)	(0.137)
		[0.008]	[0.867]	[0.867]	[0.942]	[0.13]	[0.942]	[0.085]
Uninteracted Term	–	–	–	–	–	-0.023	–	–
						(0.012)		
Interaction Term	None	Rivalry	Home Game	Wide Margin	Goals in Game	State Presence	Diversity Country	Diversity Team
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Seasonal FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Language×Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country×Match FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample:	Friendly Matches	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline
Observations	40,392	37,060	37,060	37,060	37,060	37,060	34,450	26,186
R-squared	0.087	0.104	0.104	0.104	0.104	0.104	0.107	0.113

Robust standard errors clustered at the country×year level in parentheses. False Discovery Rate (FDR) adjusted p-values are reported in square brackets (Anderson, 2008). In addition to all the interacted models presented in this table, the following alternative heterogeneous effects were also accounted for in the p-value adjustment (results in the Appendix): rural status, unemployment status, gender, education, age, and being part of ethnic majority. Post-Victory takes value 1 if the respondent was interviewed within 15 days after a victory, 0 otherwise. To ease the comparison with previous tables, variables in the interaction terms were demeaned. State presence is computed as the mean value of three indicators coded by Afrobarometer's interviewer at the enumeration area: presence of schools, post offices, and paved roads. National diversity is based on the ELF index from Fearon and Laitin (2003). Team diversity is computed as a ELF index based on the ethnic composition of the national team in the same year of the Afrobarometer's wave.

attributes are associated with a stronger effect of national team victories. This suggests that important sporting achievements influence the public as a whole, and not just sports fans (arguably disproportionately male), or people who are more likely to have a coethnic in the national team (as members of the ethnic majority), or to come in contact with other ethnicities (arguably in urban areas).[13]

We can also study specifically the link between our results and nation-building. In particular, we examine how the effect of national team victories depends on the presence of the state at the local level. We use the availability of basic public goods as a proxy for state presence since poor public good provision may arguably generate a sense of disconnect from the rest of the nation. Specifically, we use information from the Afrobarometer surveys regarding the presence of public schools, post offices, and paved roads in the area where the respondent is located, and consider the average of these three indicators. As shown in column 6 of Table 3, state presence is, unsurprisingly, associated with reduced ethnic sentiment in general. However, state presence also dampens the impact of national team victories in reinforcing national identity over ethnic allegiances.

This result is suggestive of how different forms of nation building might interact with each other. The indicators that we include in our measure are very much the sort of public goods that are often seen as vehicles for nation building: inculcation via schooling, as well as easier connection with the rest of the country. In our context, these seem to operate as substitutes for the impact of shared experiences: perhaps there is less scope for further reinforcing national identity where that has already been made stronger through other means.

We further test this idea by looking at how the effect of national team victories varies depending on the level of ethnic diversity in the country. To this end, in column 7 we interact the $Post - Victory$ dummy with ethnic diversity at the national level, as measured by Fearon and Laitin's (2003) ELF index. While the negative coefficient on the interaction term is suggestive of a stronger effect for more diverse countries, the lack of precision does not allow us to say something more definitive.

Finally, we ask whether the impact of national team performance may be related to a "role modeling" effect: the idea that showcasing how different groups can cooperate to achieve success against a common foreign adversary. For that we use the data we collected on the

[13] Although the lack of a significant difference in the impact of victories between men and women may seem surprising at first, evidence suggests that African women are very much interested in football and very supportive of their national football team. For example, according to a report on "Global Interest in Football" by Nielsen Sports, 83% of Nigerians and 66% of South Africans report being interested in football (compared to 67% in Brazil and Italy, and 61% in Germany.) Similarly, according to a survey conducted by GeoPoll among African fans during the 2018 FIFA World Cup: "a majority of both male and female respondents across all six countries [Ghana, Nigeria, Uganda, Senegal, Kenya, and Tanzania] are aware of the occurrence of the World Cup this year. Across all six countries, there is no significant difference between male and female respondents regarding who will be watching World Cup matches."

ethnic composition of the national team rosters.[14] Column 8 in Table 3 shows that greater team diversity is associated with a stronger impact of national team victories. This additional effect is quite large: if team diversity is increased by one standard deviation (i.e., 0.126), the total impact of a victory would be approximately 50% larger.

In sum, the analysis indicates that shared experiences help build national identity in specific ways that are more effective in environments where other nation building strategies are less so, and that this may work through a "role modeling" mechanism.

3.4. National Team's Victories and Inter-Ethnic Trust

Having shown that national team victories strengthen individual identification with the nation, we now turn to the question of whether they also affect the propensity to trust others, and particularly those from other ethnicities. First, we look at the effect of victories on trust towards fellow countrymen. In column 1 of Table 4 we estimate our baseline specification with country $\times$ match fixed effects using trust in countrymen as the dependent variable. The result indicates that, following a victory of the national team, individuals become more likely to trust their compatriots. Specifically, interpersonal trust increases by 6.3 percentage points after a victory (14% of its mean value).

While this could in principle be consistent with a general effect of sporting success on pro-social behavior (Platow et al., 1999), in column 2 we test whether the effect is stronger for inter-ethnic trust, using as dependent variable the self-reported measure of trust in people of other ethnic groups. Again the coefficient on *Post-Victory* is positive and significant; furthermore, it is larger than the one for trust in fellow countrymen, which suggests a stronger effect on trust outside one's own ethnicity. The sample size is considerably smaller than in our main analysis, owing to the fact that each trust question was only asked in a single wave of the Afrobarometer, and this poses a challenge from the standpoint of computing standard errors, due to the relatively small number of clusters. It is thus particularly important to note that the magnitude of the estimated coefficient is economically meaningful, as it represents an increase in inter-ethnic trust equivalent to 30% of its mean value in our sample.

To further test for the effect on the willingness to interact with members of other ethnic groups, in column 3 we use as dependent variable the response to the question on whether the respondent would like to have non-coethnic neighbors. Consistent with the previous

[14] To construct the measure of team ethnic diversity, we first downloaded the official team rosters for the relevant year, as well as the basic personal information about each player, from the website https://www.national-football-teams.com/. We then hired free-lancers from different Sub-Saharan African countries and asked them to code the (most likely) ethnicity of each player on their country's national football team based on: i) the player's first and last name, ii) the player's place of birth, iii) miscellaneous information about the player from local media and/or from the player's web page (when available). In Appendix Table A.12 we report the list of all the team-years for which we were able to collect information on players' ethnicity.

findings, national team victories improve respondents' reported inclination to live near other ethnicities.

This raises the natural question of whether the more favorable attitudes towards non-coethnic fellow citizens come at the expense of attitudes towards foreigners. It seems quite plausible that the effect of sporting success on national identity is built in opposition to the outside groups being confronted on the football pitch (Heinila, 1985; Hargreaves, 1992). For this we take advantage, in column 4, of a similar question on preferences regarding neighbors, from Round 6 of the Afrobarometer, asking about immigrants and foreign workers. The point estimate indicates a 10% increase in dislike for foreigners as neighbors, relative to the sample average, but precision is relatively low. While we cannot rule out a quantitatively meaningful impact, the evidence does not particularly support the interpretation that strengthened national identity within the country comes at the price of increased animosity towards outsiders.

TABLE 4: NATIONAL TEAM'S VICTORIES AND TRUST IN OTHERS

	(1)	(2)	(3)	(4)
	Trust in Countrymen	Inter-Ethnic Trust	Like Neighbors Other Ethnicities	Dislike Foreign Neighbors
Post-Victory	0.063	0.140	0.102	0.019
	(0.021)	(0.040)	(0.030)	(0.018)
	[0.021]	[0.018]	[0.013]	[0.387]
Individual Controls	Yes	Yes	Yes	Yes
Seasonal FE	Yes	Yes	Yes	Yes
Language×Year FE	Yes	Yes	Yes	Yes
Country×Match FE	Yes	Yes	Yes	Yes
Observations	9,355	7,973	7,511	7,497
R-squared	0.140	0.169	0.162	0.153

Robust standard errors clustered at the country × year level in parentheses. False Discovery Rate (FDR) adjusted p-values are reported in square brackets (Anderson, 2008). The outcomes (all dummies) accounted for in the p-value adjustment are: ethnic over national identity, trust in countrymen, inter-ethnic trust, like neighbors from other ethnicities, dislike foreign neighbors, trust ruling party, president's approval, and 4 indicators for the assessment of present and future own and country's economic conditions. Post-Victory takes value 1 if the respondent was interviewed in the 15 days after a victory, 0 otherwise. Trust in Countrymen takes value 1 if respondent trusts other countrymen "somewhat" or "a lot", 0 otherwise. Inter-Ethnic Trust takes value 1 if respondent trusts "somewhat" or "a lot" people of other ethnicities, 0 otherwise. Like Neighbors Other Ethnicities takes value 1 if respondent would "like" or "strongly like" having neighbors from other ethnicities, 0 otherwise. Dislike Foreign Neighbors takes value 1 if respondent would "dislike" or "strongly dislike" having immigrants or foreign workers as neighbors, 0 otherwise. For ordered probit estimates see Table A.19.

3.5. NATIONAL TEAM VICTORIES AND OTHER ATTITUDES

An important question is whether weaker ethnic identity and higher inter-ethnic trust reflect a genuine change in attitudes in that domain, or rather a generally euphoric mood due to the national team's achievements. In particular, it could be the case that the impact of sporting achievements could work through a strictly individual positive predisposition or perception of increased well-being (as in Edmans et al. (2007) or Eren and Mocan (2018)), as opposed to (the perception of) a shared collective experience between fellow citizens.

One way to test this alternative hypothesis is to examine whether victories are also associated with changes in other attitudes unrelated to ethnic sentiments: we would expect that the positive individual sentiment would spill over to dimensions other than ethnic identity. In Appendix Table A.13 we find that victories do not increase respondents' trust in the ruling

party or the approval rate of the president, indicating that football-driven patriotic shocks do not necessarily translate into generally more positive political attitudes and into higher support for incumbent rulers, at least in the Sub-Saharan African context.[15] Neither does the effect of national team victories seem to be driven by general euphoria or optimism, as we find no impact on whether a respondent reports having a positive assessment of the country's current economic conditions, positive expectations of whether they will improve in the near future, or positive assessments of their own living conditions (see Appendix Tables A.14 through A.18). While national team victories could certainly have a general "warm-glow" effect on individuals, the evidence here seems consistent with a role played by the shared collective experience as such.

4. Country-Level Analysis

The results presented so far indicate that football-driven positive shocks contribute to lower ethnic identification and decreased inter-ethnic mistrust. An important related question is whether those shocks may also reduce actual violence, and how long-lasting this effect may be. An extensive literature has documented the links between ethnicity and civil conflict (Fearon and Laitin, 2003; Doyle and Sambanis, 2006), and noted that ethnic identity can both affect and be affected by conflict (Horowitz, 2001; Sambanis and Shayo, 2013).
To shed light on this issue we analyze how civil conflict in Sub-Saharan African countries evolves following important achievements of the national football teams. For this, we need to focus on achievements that are sufficiently important that they would conceivably have a detectable impact on the prevalence of conflict.

4.1. Empirical Strategy

We exploit quasi-experimental variation in whether a team qualified for the tournament phase of the Africa Cup of Nations (ACN), the most important continental competition for African national teams, which generates widespread popular attention. The ACN involves two phases: i) a qualifying stage in which all teams compete, and ii) a final (or tournament) stage in which only the teams that ranked highest in the qualifying round compete for the title. In the qualifying round teams are divided into groups, each team plays each of the others twice (one at home and one away) with each match assigning a certain number of points, and the team(s) with the most points (usually one or two) qualify to the final round. The qualifying stage is usually very competitive, and qualification is often decided only in

[15] Evidence that sports victories or losses, and the resulting euphoria or disappointment, can affect support for incumbents is available, for example, from Healy et al. (2010) and Corbi (2018).

the last match day based on just a narrow point margin or goal difference.[16]

Our strategy consists in i) identifying teams in the same group that, until the last match day of the group stage, were both in a position to qualify, but one of which barely did while the other did not, and ii) compare the evolution of conflict in the two countries in the six months before and after the qualification.[17]

Our identification strategy is summarized by the following equation:

$$Conf_{c,q,t} = \alpha + \beta Post - Qual_{c,q,t} + \sum_{k=1}^{4} \delta^k Conf_{c,q,t-k} + \sum_{t=-25}^{25} \Gamma_t + \Pi_t + \Delta_{c,q} + \varepsilon_{c,q} \quad (2)$$

where c, q, and t denote country, qualification, and week to and since qualification (-25 to +25). $Conf$ is a measure of conflict intensity. $Post - Qual$, our regressor of interest, is a dummy variable that equals 1 for countries of teams that qualified only in the weeks after qualification, and 0 otherwise. $\sum_{t=-25}^{25} \Gamma_t$ is a set of dummies for each of the weeks before and after the qualification, while Π_t and $\Delta_{c,q}$ are calendar-month and country $\times$ qualification campaign fixed effects, respectively. To control for possible auto correlation in conflict events, we also control for the occurrence of conflict in the previous weeks (up to four). (Note that our number of periods is sufficiently large (50), so that the typical Nickell bias (Nickell, 1981) from combining lagged dependent variable and fixed effects is less of a concern.) Heteroskedasticity-robust standard errors are clustered by country $\times$ qualification campaign.

4.1.1. Close Qualification to ACN

Our key comparison is between countries that barely qualified to the ACN finals (our treatment group) and those that did not (our control group). The underlying identification assumption is that if two teams in the same group got to the last match day with concrete chances of qualifying, which one would actually qualify will be determined by quasi-random circumstances, such as a goal scored in the final minutes of the last match by one side or the other. One example of such scenario, depicted in Figure 3, is available from 2012, when

[16] The qualification phase for the 2013 ACN did not involve a group stage, but rather sequential two-legged knock-out pairs. We thus consider in our analysis only the last match of the final two-legged knock-out stage. Our quantitative and qualitative results do not depend on the inclusion of the 2013 qualification phase (see Figure A.7).

[17] Qualification to the WC provides a potentially similar experiment, but poses challenges regarding the definition of control and treatment groups (e.g. Angola barely qualified to the ACN in 1997, while barely missing out on the WC in the same year) and adds relatively little variation. This is because, in addition to the WC only happening every four years, there are few spots for African countries (five, since 1998). What is more, most of those are typically taken by a very small number of historically strong teams, many of which are from North Africa. In any case, we will discuss the implications of including WC qualifiers into the sample, and show that results are in line with the ACN results, though with interesting exceptions that help shed light on mechanisms.

FIGURE 3: EXAMPLE OF CLOSE QUALIFICATION: GROUP A, ACN 2012

Team	Pld	W	D	L	GF	GA	GD	Pts
Mali	5	3	0	2	7	4	3	9
Zimbabwe	5	2	2	1	6	3	3	8
Cape Verde	5	2	1	2	5	6	-1	7
Liberia	5	1	1	3	5	10	−5	4

08/10/2011	Liberia	2 – 2	Mali
	Cape Verde	2 – 1	Zimbabwe

Team	Pld	W	D	L	GF	GA	GD	Pts
Mali	6	3	1	2	9	6	3	10
Cape Verde	6	3	1	2	7	7	0	10
Zimbabwe	6	2	2	2	7	5	2	8
Liberia	6	1	2	3	7	12	−5	5

three teams in qualifying group A, Mali, Zimbabwe, and Cape Verde, were in position to qualify until the last match day while only one team, Liberia, was already eliminated. In the last two matches while Cape Verde defeated Zimbabwe, Mali was not able to beat Liberia but still managed to qualify due to a one-goal difference. In this case Mali would be included in the treatment group while both Cape Verde and Zimbabwe in the control group.

After we exclude countries that had already qualified or had no shot at qualifying by the time of the last match, we end up with 49 country-qualification campaign pairs in the treatment group, and 60 in the control group. (The full list is in Appendix Table A.20.) We test whether the two groups are balanced along a range of characteristics that may affect conflict. As shown in Appendix Table A.21, the only variable that is unbalanced (at the 10% level) is population density, which is somewhat lower for treatment than for control countries. Still, in our empirical analysis we will control for country $\times$ qualification campaign fixed effects, which account for all observable and unobservable factors specific to a country, in a given year, that may affect conflict.

4.2. CLOSE QUALIFICATION TO ACN AND CONFLICT

We now turn to the effect of national teams' (close) qualification on conflict, using data from ACLED on the occurrence and severity of violent conflict events in Sub-Saharan African countries between 1997 and 2015, and focusing on the months before and after each ACN qualification campaign.

Our key results are in Table 5. We start by estimating, in column 1, our baseline specifica-

tion with country×qualifying campaign, week since qualification, and calendar-month fixed effects (equation 2), using as dependent variable the log of the number of conflict events that occurred in the country in a given week. The results indicate that the number of conflict events is significantly lower in the months following the qualification. The effect remains largely unchanged in column 2 where we control for conflict in each of the previous four weeks.

The effect is quantitatively sizable: the point estimate from column 2 indicates that countries whose teams barely qualified to the ACN experience a reduction of 8.6% in the number of conflict episodes (i.e, $100 \times (e^{-0.09} - 1)$), relative to countries whose teams barely did not. The table also reports the long-run impact of the qualification, which takes into account the effect of a reduction in today's conflict on future violence.[18] In the Online Appendix, we show that results are robust when we use as dependent variable a dummy for the occurrence of conflict events, or the number of conflict victims (Appendix Tables A.22 and A.23), that no particular country, ACN qualification process, or country-qualification campaign drives our main results (Appendix Figures A.7 and A.8), and that they hold when we weigh observations using country population as of 1990 (Appendix Table A.24) .

To further corroborate our identification strategy, we estimate a variant of equation 2 pooling observations for treatment and control groups and assigning a fictitious treatment, to countries that will eventually qualify, in the 12-week period before qualification. If conflict was evolving differently in the two groups in the pre-qualification period, which would threaten the validity of our differences-in-differences approach, we would expect the fictitious treatment to display a significant coefficient. The results, in columns 3 and 4 of Table 5, point against this possibility. In particular, there is no indication that conflict was decreasing in countries that would eventually qualify, relative to countries that would not.

How persistent is this effect? To examine that, we re-estimate our specifications splitting the post-qualification period in two sub-periods: the first 12 weeks after qualification, and the subsequent 13 weeks. We see a reduction in conflict of a similar magnitude for the two periods (columns 5 and 6). Columns 7 and 8 then show that we obtain analogous results from maximum likelihood negative binomial regressions, with the number of events as the dependent variable, showing that the message does not hinge on the log functional form. Additionally, Appendix Table A.25 show that our main results hold when we use an hyperbolic sine inverse transformation of the dependent variable.

Figure 4 provides graphical evidence of the impact of qualification on conflict events, as well as its persistence, with Appendix Figures A.5 and A.6 showing analogous plots for the

[18] Specifically, using point estimates from equation 2, the long-run impact is computed as $\frac{\hat{\beta}}{1-\sum_{k=1}^{4}\hat{\delta}^k}$. Standard errors for estimates of long-run impacts are computed using the "delta method".

TABLE 5: ACN QUALIFICATION AND CONFLICT

	Dependent Variable							
	Log (1+ Number of Events)						Number of Events	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Post-Qualification	-0.131	-0.090					-0.307	-0.227
	(0.064)	(0.039)					(0.156)	(0.127)
12 Weeks Before Qualification			0.046	0.028				
			(0.062)	(0.054)				
1-12 Weeks Post-Qualification (a)					-0.124	-0.098		
					(0.064)	(0.038)		
13-25 Weeks Post-Qualification (b)					-0.137	-0.083		
					(0.081)	(0.053)		
Long-Run Impact	-0.131	-0.145	0.046	0.034	-	-	-	-
	(0.064)	(0.065)	(0.062)	(0.065)	-	-	-	-
Prob > F H0 : a = b	-	-	-	-	0.856	0.750	-	-
Regression Method	OLS	OLS	OLS	OLS	OLS	OLS	Negative Binomial	
Country × Qual. Campaign	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Week FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Calendar-Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4 Lags of Dep. Var.	No	Yes	No	Yes	No	Yes	No	Yes
Prob > F H0: 4 lags jointly = 0	-	0.00	-	0.00	-	0.00	-	0.00
Observations	5,450	5,014	2,725	2,289	5,450	5,014	5,450	5,014
Within R-sq	0.004	0.080	0.000	0.025	0.004	0.080	-	-

Robust standard errors in parentheses clustered at the country× qualification campaign level. Sample in columns 1-2 covers 25 weeks before the end of qualification process (i.e. pre-treatment period) for 109 country × qualification campaign. The variable 12 Weeks Before Qualification takes value 1 during the 12 weeks immediately before the end of the qualification process for the countries that will eventually qualify to the ACN, 0 otherwise. The sample for columns 3-8 includes the 25 weeks before and after the close qualification for 109 country × qualification campaign. The variable *Post-Qualification* takes value 1 for the team that qualified for the weeks after the qualification and 0 otherwise. The variable 13-25 Weeks Post-Qualification takes value 1 starting the 13th week after the end of the qualification process for the countries that barely qualify to the ACN, 0 otherwise. Prob > F H0 : a = b refers to the F-tests with the Null Hypothesis 1-12 Weeks Post-Qualification = 13-25 Weeks Post-Qualification. Conflict data comes from the ACLED dataset.

probability of conflict and number of fatalities. In Panel A, we plot the estimated coefficients and 95% confidence intervals of the interaction terms between the treatment variable and dummies for eleven four-week periods in the months before and after the qualification, with the coefficient on the four-week periods immediately before qualification normalized to zero, to facilitate interpretation. The results indicate clearly that the number of conflict events decreases sharply in the weeks following the qualification to the ACN tournament, and remains negative though with some convergence after three months – in fact, the coefficients are significantly negative for up to five months for the conflict dummy, as can be seen in Appendix Figure A.5. The coefficients for the periods before qualification, in contrast, are very close to zero, confirming the absence of any differential trend in countries that would later qualify.

An interesting related question is whether the difference between the two different groups of countries is driven by a reduction in conflict among qualifiers, or alternatively by an increase in conflict among non-qualifiers. While either would lead to the pattern detected in our results, they would obviously have rather different implications. As we see in Panels B and C of Figure 4, the evidence shows a pattern of decreased conflict in the former group, and no corresponding increase in the latter.

In sum, these findings provide robust evidence that important achievements of the national team can contribute to reducing violence in a tangible and rather persistent way.

4.3. "Unexpected" Qualification

We then examine whether unexpected qualifications have a stronger effect on conflict. Indeed, it seems plausible that qualification to the ACN tournament may be perceived as an especially important achievement for teams that never qualified in the past or that had not qualified in a long time, as opposed to teams that usually do. This would be in line with previous findings on the effect of sports results on violence and crime which indicate that unexpected outcomes are more consequential than expected ones (Card and Dahl, 2011; Munyo and Rossi, 2013).

To test this hypothesis, in Table 6 we estimate our baseline specification separately for i) countries that had not qualified in three years or more (i.e., the sample mean) and ii) countries that had never qualified. We also estimate our baseline specification for the full sample adding interaction terms accounting for these "unexpected qualifications". Though relatively imprecise, the results suggest that the reduction in conflict is indeed stronger in the case of overdue and first-time qualifications. This is also true for the probability of conflict and number of fatalities, as can be seen in Appendix in Tables A.26 and A.27 (with the exception of the impact first-time qualification on number of fatalities for which we find statistically

FIGURE 4: NUMBER OF CONFLICT EPISODES BEFORE AND AFTER QUALIFICATION

FIGURE A: POOLED (4-WEEK BANDWIDTHS)

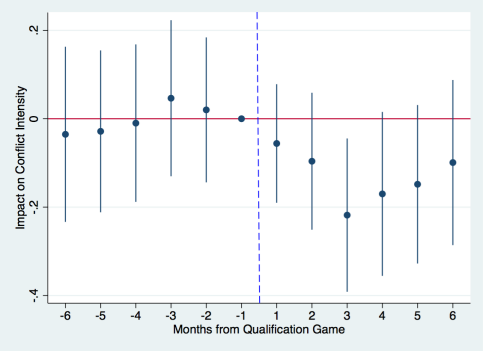


FIGURE B: TREATMENT COUNTRIES (4-WEEK BANDWIDTHS)

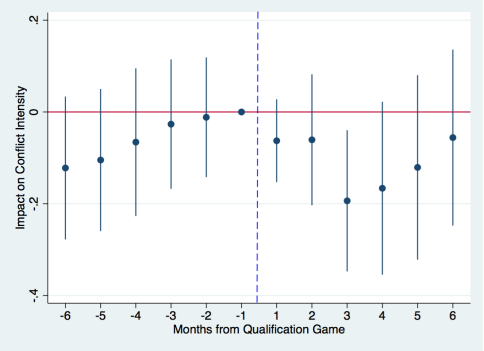


FIGURE C: CONTROL COUNTRIES (4-WEEK BANDWIDTHS)

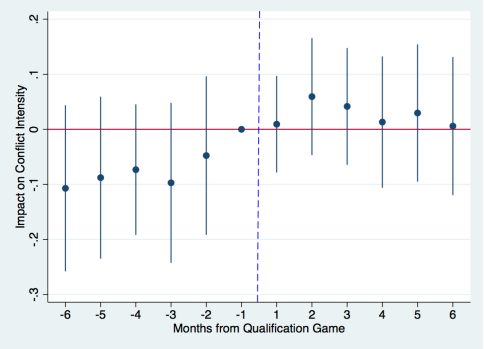


Figure A plots coefficients and 95% confidence intervals for interactions between the dummy for countries that barely qualified to the ACN and 11 dummies for 4-week period included between 25 weeks before and after the qualification. The regressions also include week FE, calendar-month FE, and country $\times$ qualifier dummies. Figure B plots coefficients and 95% confidence intervals for 11 dummies for 4-week period included between 25 weeks before and after the qualification for the groups of countries that barely qualified to the ACN. The regressions calendar-month FE and country $\times$ qualifier dummies (week FE are omitted to avoid perfect multicollinearity). Figure C replicates Figure B for the groups of countries that barely did not qualify to the ACN. The dependent variable in all regressions is log (1 + number of conflict events). The coefficients for the 4 weeks immediately before the end of the qualification process are normalized to zero. Confidence intervals are based on heteroskedasticity-robust standard errors clustered by country $\times$ qualifier.

TABLE 6: OVERDUE AND FIRST QUALIFICATION EFFECTS

	Dependent Variable: Log (1 + Number of Events)				
	(1)	(2)	(3)	(4)	(5)
Post-Qualification	-0.090	-0.153	-0.087	-0.273	-0.099
	(0.039)	(0.070)	(0.043)	(0.137)	(0.042)
Post-Qualification x Overdue			-0.148		
			(0.088)		
Post-Qualification x First Time					-0.226
					(0.176)
Prob > F	-	-	0.10	-	0.07
Sample	Full	Overdue qualif.	Full	1st qualif.	Full
Country × Qual. Campaign FE	Yes	Yes	Yes	Yes	Yes
Week FE	Yes	Yes	Yes	Yes	Yes
Calendar-Month FE	Yes	Yes	Yes	Yes	Yes
4 lags of Dep. Var.	Yes	Yes	Yes	Yes	Yes
Prob > F H0: 4 lags jointly = 0	0.00	0.00	0.00	0.00	0.00
Observations	5,014	2,438	5,014	736	5,014
Within R-sq	0.080	0.097	0.081	0.124	0.081

Robust standard errors in parentheses clustered at the country× qualification campaign level. Sample covers +/- 25 weeks around the end of qualification process. Post-Qualification takes value 1 during the 25 weeks following the qualification to ACN, 0 otherwise. Conflict data comes from the ACLED dataset. An overdue (first-time) qualification is defined as reaching the last match-day with chances of qualifying to the ACN finals after 3 or more years (for the very first time). See Appendix Table A.20. Prob > F refers to the F-tests with the Null Hypothesis that coefficients for post-qualification and its interaction with overdue (column 3) or first-time qualification (column 5) are jointly equal to zero. Interaction terms were demeaned to ease the comparison of uninteracted terms.

insignificant coefficient for the interaction term.).

This pattern also sheds light on the alternative natural experiment induced by WC qualification. Table A.28 in the Appendix shows that including instances of last-round qualification for the WC into our sample seems to weaken the results. The table also shows, however, that this is entirely driven by Cameroon and Nigeria, which are by far the most regular Sub-Saharan African WC participants.[19] This underlines the point that a close qualification constitutes a very different kind of shock in countries that regularly qualify: in fact, late qualification might well be perceived not as a positive shock, in these cases, but rather as a relative disappointment.

[19] Specifically, in the entire history of the WC, there have been 44 African participants. Sub-Saharan Africa accounts for only 27 of those; out of these, Cameroon and Nigeria account for seven and six, respectively, with Ghana, Ivory Coast, and South Africa next with three each. In total, a mere nine Sub-Saharan African countries have ever qualified (with one, Zaire, only way back in 1974).

TABLE 7: ETHNIC CONFLICT, ETHNIC POLITICAL POWER, AND LINGUISTIC DIVERSITY

	Dependent Variable: Log (1 + Number of Events)				
	(1)	(2)	(3)	(4)	(5)
Post-Qualification	-0.024	-0.003	-0.057	-0.030	-0.062
	(0.012)	(0.011)	(0.026)	(0.022)	(0.031)
Long-Run Impact	-0.033	-0.003	-0.089	-0.047	-0.100
	(0.019)	(0.013)	(0.038)	(0.038)	(0.050)
Event Definition	Ethnic	Strong Political Power	Weak Political Power	No Linguistic Diversity	High Linguistic Diversity
Country × Qual. Campaign FE	Yes	Yes	Yes	Yes	Yes
Week FE	Yes	Yes	Yes	Yes	Yes
Calendar-Month FE	Yes	Yes	Yes	Yes	Yes
4 lags of Dep. Var.	Yes	Yes	Yes	Yes	Yes
Prob > F H0: 4 lags jointly = 0	0.00	0.00	0.00	0.00	0.00
Observations	5,014	5,014	5,014	5,014	5,014
Within R-sq	0.057	0.042	0.073	0.066	0.078

Robust standard errors in parentheses clustered at the country× qualification campaign level. Sample covers +/- 25 weeks around the end of qualification process. Post-Qualification takes value 1 during the 25 weeks following the qualification to ACN, and 0 otherwise. Each column presents point estimates and standard errors for a regression of the baseline specification using different definitions of conflict events as dependent variable. Ethic conflict is coded using the procedure described in the main text. Strong political power refers to conflict events taking place in locations inhabited by ethnic groups with strong political power (i.e., monopoly or dominant according to the ethnic power relations core dataset -EPR-). Weak political power refers to conflict events taking place in locations inhabited by ethnic groups with no political power (i.e., discriminated, powerless or self excluded according to the ethnic power relations core dataset -EPR-). No linguistic diversity (High linguistic diversity) refers to conflict events taking place in first-level administrative sub-national units wherein only one language is (more than 5 different languages are) spoken. Language data comes from Ethnologue. All conflict data are from the ACLED dataset.

4.4. ETHNIC CONFLICT

Is the impact on conflict related to the role of ethnic identity? To shed light on that, in Table 7 we investigate the effect of qualification to the ACN tournament on conflict events classified as ethnically related, according to the procedure described in Section 2.3. In column 1, corresponding to our most comprehensive specification – with country × qualifier, calendar-month, and week fixed effects and lags of conflict – we find that national team's qualification to the ACN finals reduced the number of conflict events. (Once again, the results also hold for prevalence of conflict and number of fatalities, as shown in Appendix Tables A.29 and A.30.) Though smaller than for overall conflict, the effect is sizable, with the qualification reducing the intensity of ethnic violence by 3% in the long-run.

To further interrogate the mechanism, we can exploit the information on the spatial location of different conflict episodes. In particular, we can consider the ethnic characteristics of the conflict areas, by matching them to ethnic homelands. In columns 2 and 3, we consider the degree of national political power of the local ethnic group, as classified by the Ethnic Power Relations (EPR) dataset. In particular, we distinguish conflict events occurring in areas inhabited by politically strong groups ("monopoly" or "dominant" groups, according to EPR) from those in places inhabited by politically weak ones ("discriminated," "powerless," or "self-excluded"). While keeping in mind the caveat that the strength of different ethnic groups is endogenous, we do see a more pronounced effect in the latter case, which is where we would expect issues of national identity to be more fraught.

Along similar lines, columns 4 and 5 turn to measures of local ethnic diversity, as proxied by the number of languages spoken in the (first-level) administrative sub-national unit to which a given location belongs (from the Ethnologue dataset). The effect is larger in areas with high linguistic diversity (i.e. more than five languages spoken) than in monolingual places. Once again, this is where we would expect issues of national vs ethnic identity to loom larger.

In sum, and in combination with the results on attitudes, the evidence is consistent with the idea that the reduction in violence induced by national team achievements could be related to their role in priming a sentiment of national unity and alleviating inter-ethnic cleavages.

4.5. Alternative Explanations

Finally, we analyze two alternative explanations for the negative effect of qualification on conflict documented above. The first one is that the decline in conflict may be partly due to the coincidence with the ACN tournament, which, in some cases, took place within six months from qualification. Indeed, since the ACN finals are very popular and are broadcast around the continent, they may distract many individuals who may otherwise engage in violence, particularly in countries that qualified.

To test for this possibility, we first re-estimate our baseline specification excluding from the sample the weeks during which the ACN finals were taking place. The results, shown in column 1 of Table 8, indicate that the effect of qualification on conflict remains virtually unchanged. Further, in column 2 we look at the entire sample but include a dummy for the weeks during which the ACN's finals are taking place only for teams that qualified. The results are virtually unaltered.

The second possibility relates to the news-based nature of the ACLED conflict data. A conflict event is recorded by ACLED only if it is mentioned by at least one of a multiplicity of local, national, or international media, (or if it is reported by local NGOs). It is in principle possible that the qualification of the national team to the ACN tournament may lead to an

TABLE 8: POTENTIAL INCAPACITATION EFFECT AND NEWS CROWDING OUT

	Dependent Variable: Log (1 + Number of Events)				
	(1)	(2)	(3)	(4)	(5)
Post-Qualification	-0.092	-0.091	-0.032	-0.030	-0.019
	(0.039)	(0.038)	(0.017)	(0.014)	(0.010)
Long-Run Impact	-0.147	-0.147	-0.041	-0.038	-0.022
	(0.064)	(0.064)	(0.022)	(0.019)	(0.012)
Omitted Observations	ACN weeks	None	None	None	None
Model Specification	Baseline	Treatment Interacted ACN weeks	Baseline	Baseline	Baseline
Fatality Threshold	None	None	>10 fat.	>25 fat.	>50 fat.
Country × Qual. Campaign FE	Yes	Yes	Yes	Yes	Yes
Week FE	Yes	Yes	Yes	Yes	Yes
Calendar-Month FE	Yes	Yes	Yes	Yes	Yes
4 Lags of Dep. Var.	Yes	Yes	Yes	Yes	Yes
Prob > F H0: 4 lags jointly = 0	0.00	0.00	0.00	0.00	0.00
Observations	4,715	5,014	5,014	5,014	5,014
Within R-sq	0.078	0.080	0.039	0.038	0.036

Robust standard errors in parentheses clustered at the country×qualification campaign level. Sample covers +/- 25 weeks around the end of qualification process. Post-Qualification takes value 1 during the 25 weeks following the qualification to ACN, and 0 otherwise. All conflict data are from the ACLED dataset.

increase in the number of football-related news in local media that may crowd out news about the conflict, potentially leading to a mechanical reduction in the number of conflict events recorded by ACLED.[20] To the extent that football-related news are likely more extensive during the finals of the ACN, the results in columns 1 and 2 of Table 8 are reassuring that this aspect is not driving our results. Yet, it could be that football-news increase in the months prior to the ACN finals, as the discussion about players' selection and teams' prospects intensifies.

To test for the crowding-out hypothesis, we check whether the effect is driven by less severe conflict events, which should be more likely to go unreported due to competition from football news than events involving a higher number of fatalities. We implement this approach by estimating our baseline specification for the occurrence of conflict events of increasing severity, i.e. involving 10 or more fatalities, 25 or more fatalities, and 50 or more fatalities. Columns 3-5 in Table 8 show that the results are similar for the different samples, suggesting that reporting bias is not driving our results.[21]

5. Conclusions

Marshaling multiple pieces of evidence, we have shown that collectively shared experiences of the type induced by sports – and international football in particular – can shape identities in ways that can help build national sentiment at the expense of ethnic identification. In the context of Sub-Saharan Africa, we find that individuals interviewed in the days immediately after a victory of their national football team are less likely to report a strong sense of ethnic (as opposed to national) identity than those interviewed just before. The estimated effect is sizable – accounting for a 37% decrease in the average probability of ethnic self-identification – and robust to different specifications and controls.

Exposure to national teams' victories is also associated with a higher level of trust in others, in general, and in individuals of other ethnicities, in particular. These effects appear to be driven by a genuine increase in national pride rather than generic post-victory euphoria; indeed national team's victories have no significant impact on other attitudes such as support for the government or optimism about present and future economic conditions.

Sporting success, we show, also affects tangible outcomes related to ethnic identity. Specifically, we find that countries whose national teams (barely) qualified to the finals of the

[20] Evidence that news coverage of important sporting events on TV can crowd out news about other issues, such as natural disasters or conflict, is available from Eisensee and Stromberg (2007) and Durante and Zhuravskaya (2018).

[21] As a further robustness check, we replicate our analysis using data on conflict from UCDP-GED, which are arguably less vulnerable to this issue. Reassuringly we find qualitatively similar results (available upon request) though less precise due to the much smaller number of conflict events in the UCDP-GED sample.

African Cup of Nations experience significantly less ethnic civil conflict in the six months after the qualification than countries whose teams (barely) did not qualify. This effect is not only sizable and statistically significant, but also persists for several months after the successful event.

Several policy-relevant implications follow from our findings, going well beyond the realm of sports. First, policies that favor emotional participation – which could be triggered, say, by religious or civic events – may be most effective at forging a shared sentiment of unity and set the foundations for more long-lasting cultural and political changes. They also highlight that nation-building strategies are available even in contexts of low state capacity, and might work as a substitute for other more demanding nation-building tools, especially by illustrating how different groups can successfully cooperate.

It is important to note that the power of these shared collective experiences need not be used for good. Even in our specific context, it is certainly possible that the reduction in friction and violence within countries could coexist with increased conflict with other countries. This is so especially to the extent that the strengthening of national identity is taking place in a context of contrast with foreign adversaries, even though we do not find strong evidence of increased reported animosity toward foreigners. More broadly, the passions ignited by sports can certainly be channeled to violence in other contexts as well. These remain interesting topics for future research.

REFERENCES

Adida, Claire L., Karen E. Ferree, Daniel N. Posner, and Amanda Lea Robinson, "Who's asking? Interviewer coethnicity effects in African survey data," 2015. Afrobarometer WP 158.

Afrobarometer, *Round 4 Survey Manual*, Afrobarometer, 2007.

Afrobarometer, "Afrobarometer Data. Rounds 2, 3, 4, 5, and 6," 2016. Available at http://www.afrobarometer.org.

Alesina, Alberto and Bryony Reich, "Nation Building," Working Paper 18839, National Bureau of Economic Research February 2015.

_ and Eliana La Ferrara, "Preferences for redistribution in the land of opportunities," *Journal of Public Economics*, 2005, *89* (5), 897–931.

_ , Bryony Reich, and Alessandro Riboni, "Nation-Building, Nationalism and Wars," Working Paper 23435, National Bureau of Economic Research 2017.

_ , Reza Baqir, and William Easterly, "Public Goods and Ethnic Divisions*," *The Quarterly Journal of Economics*, 1999, *114* (4), 1243–1284.

Allison, L, "Sport and Nationalism," in J Coakley an E. Dunning, ed., *Handbook of Sports Studies*, London: SAGE Publications Ltd, 2000, chapter 22, pp. 345–356.

Alvarez, Javier and Manuel Arellano, "The Time Series and Cross-Section Asymptotics of Dynamic Panel Data Estimators," *Econometrica*, 2003, *71* (4), 1121–1159.

Anderson, Benedict, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, Verso, 1983.

Anderson, Michael L., "Multiple Inference and Gender Differences in the Effects of Early Intervention: A Reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects," *Journal of the American Statistical Association*, 2008, *103* (484), 1481–1495.

Armstrong, Gary, "Talking up the game: Football and the reconstruction of Liberia, West Africa," *Identities: Global Studies in Culture and Power*, 2002, *9* (4), 471–494.

Bandiera, Oriana, Myra Mohnen, Imran Rasul, and Martina Viarengo, "Nation-Building through Compulsory Schooling during the Age of Mass Migration," *The Economic Journal*, 2018.

Bandyopadhyay, Sanghamitra and Elliott Green, "Nation-building and conflict in modern Africa," *World Development*, 2013, *45*, 108–118.

Bazzi, Samuel, Arya Gaduh, Alexander Rothenberg, and Maisy Wong, "Unity in Diversity? How Intergroup Contact Can Foster Nation Building," *Working Paper*, 2018.

Bel, Germà, "Infrastructure and nation building: The regulation and financing of network transportation infrastructures in Spain (1720–2010)," *Business History*, 2011, *53* (5), 688–705.

Berge, Lars I.O., Kjetil Bjorvaten, Simon Galle, Edward Miguel, Daniel Posner, Bertil Tungodden, and Kelly Zhang, "How Strong Are Ethnic Preferences?," 2015. UC Berkeley (unpublished).

Bertoli, Andrew D., "Nationalism and Conflict: Lessons from International Sports," *International Studies Quarterly*, 2017, *61* (4), 835–849.

Billig, Michael, *Banal Nationalism*, Sage, 1995.

Boisjoly, Johanne, Greg J. Duncan, Michael Kremer, Dan M. Levy, and Jacque Eccles, "Empathy or Antipathy? The Impact of Diversity," *American Economic Review*, 2006, *96* (5), 1890–1905.

Buggle, Johannes C, "Law and social capital: Evidence from the Code Napoleon in Germany," *European Economic Review*, 2016, *87*, 148–175.

Burns, Justine, Lucia Corno, and Eliana La Ferrara, "Interaction, Stereotypes and Performance: Evidence from South Africa," 2018. BREAD WP 549.

Card, David and Gordon B Dahl, "Family violence and football: The effect of unexpected emotional cues on violent behavior," *The Quarterly Journal of Economics*, 2011, pp. 103–143.

Carlin, John, *Playing the Enemy: Nelson Mandela and the Game that Made a Nation*, Penguin Books, 2008.

Cederman, Lars-Erik, Andreas Wimmer, and Brian Min, "Why Do Ethnic Groups Rebel? New Data and Analysis," *World Politics*, 2010, *62* (1), 87–119.

_ , Kristian Skrede Gleditsch, Idean Salehyan, and Julian Wucherpfennig, "Transborder ethnic kin and civil war," *International Organization*, 2013, *67* (02), 389–410.

Cialdini, Robert B and Kenneth D Richardson, "Two indirect tactics of image management: Basking and blasting.," *Journal of personality and social psychology*, 1980, *39* (3), 406.

_ and Maralou E De Nicholas, "Self-presentation by association.," *Journal of personality and social psychology*, 1989, *57* (4), 626.

_ , Richard J Borden, Avril Thorne, Marcus Randall Walker, Stephen Freeman, and Lloyd Reynolds Sloan, "Basking in reflected glory: Three (football) field studies.," *Journal of personality and social psychology*, 1976, *34* (3), 366.

Clingingsmith, D., A.I. Khwaja, and M. Kremer, "Estimating the Impact of The Hajj: Religion and Tolerance in Islam's Global Gathering," *Quarterly Journal of Economics*, 2009, *124* (3), 1133–1170.

Conversi, Daniele, "'We are all equals!' Militarism, homogenization and 'egalitarianism' in nationalist state-building (1789-1945)," *Ethnic and racial studies*, 2008, *31* (7), 1286–1314.

Corbi, R., "When Are Politically Irrelevant Events Relevant to Election Outcomes?," 2018. University of Sao Paulo.

Darby, Paul, *Africa, football, and FIFA: Politics, colonialism, and resistance*, Vol. 23, Psychology Press, 2002.

_ , "'Let Us Rally Around the Flag': Football, National-Building, and Pan-Africanism in Kwame Nkrumah's Ghana," *The Journal of African History*, 2013, *54* (02), 221–246.

_ , "Moving players, traversing perspectives: Global value chains, production networks and Ghanaian football labour migration," *Geoforum*, 2013, *50*, 43–53.

Doyle, M. and N. Sambanis, *Making War and Building Peace: United Nations Peace Operations*, Princeton University Press, 2006.

Durante, Ruben, "Risk, Cooperation and the Economic Origins of Social Trust: an Empirical Investigation," 2011.

_ **and Ekaterian Zhuravskaya**, "Attack when the World is not Watching? U.S. Media and the Israeli-Palestinian Conflict," *Journal of Political Economy*, 2018, *126* (3), 1085–1133.

Easterly, William and Ross Levine, "Africa's growth tragedy: policies and ethnic divisions," *The Quarterly Journal of Economics*, 1997, pp. 1203–1250.

Edmans, A., D. Garcia, and O. Norli, "Sports Sentiment and Stock Returns," *Journal of Finance*, 2007, *62* (4), 1967–1998.

Eifert, Benn, Edward Miguel, and Daniel N Posner, "Political competition and ethnic identification in Africa," *American Journal of Political Science*, 2010, *54* (2), 494–510.

Eisensee, Thomas and David Stromberg, "News Droughts, News Floods, and U. S. Disaster Relief," *Quarterly Journal of Economics*, 2007, *122* (2), 693–728.

Eren, O. and N. Mocan, "Emotional Judges and Unlucky Juveniles," *American Economic Journal: Applied Economics*, 2018, *10* (3), 171–205.

Fearon, James D. and David D. Laitin, "Ethnicity, Insurgency, and Civil War," *American Political Science Review*, 2003, *97*, 75–90.

FIFA Statistical Office, "Official Matches Data 1990-2015," 2018. Federation Internationale de Football Association, Communications and Public Affairs Division.

Finer, Samuel E, "State-and nation-building in Europe: the role of the military," in Charles Tilly, ed., *The formation of national states in Western Europe*, Princeton University Press Princeton, 1975, pp. 84–163.

Francois, Patrick, Ilia Rainer, and Francesco Trebbi, "How is power shared in Africa?," *Econometrica*, 2015, *83* (2), 465–503.

Green, Elliot D., "Ethnicity, national identity and the state: evidence from sub-Saharan Africa.," *British Journal of Political Science*, 2017.

Hargreaves, John, "Olympism and Nationalism: Some Preliminary Consideration," *International Review for the Sociology of Sport*, 1992, *27* (2), 119–135.

Healy, Andrew J, Neil Malhotra, and Cecilia Hyunjung Mo, "Irrelevant events affect voters' evaluations of government performance," *Proceedings of the National Academy of Sciences*, 2010, *107* (29), 12804–12809.

Heere, B., M. Walker, H. Gibson, B. Thapa, S. Geldenhuys, and W. Coetzee, "The power of sport to unite a nation: the social value of the 2010 FIFA World Cup in South Africa," *European Sport Management Quarterly*, 2013, *13* (4), 450–471.

_ , _ , _ , _ , _ , and _ , "Ethnic identity over national identity: an alternative approach to measure the effect of the World Cup on social cohesion," *Journal of Sport & Tourism*, 2016, *20* (1), 41–56.

Heinila, Kalevi, "Sport and International Understanding—A Contradiction in Terms?," *Sociology of Sport Journal*, 1985, *2* (3), 240–248.

Herbst, Jeffrey, *States and power in Africa: Comparative lessons in authority and control*, Princeton University Press, 2014.

Hilton, Christopher, *How Hitler Hijacked World Sport: The World Cup, the Olympics, the Heavyweight Championship and the Grand Prix*, The History Press, 2011.

Hobsbawm, E. J., *Nations and nationalism since 1870: Programme, myth, reality*, Cambridge University Press, 1990.

Horner, Elka Peterson, "Rally Around the Flag and Support the Black Stars: Multi-Relational Analysis of Nationalism and Contemporary Football in Ghana," 2010. Independent Study Project (ISP) Collection. 911.

Horowitz, D. L., *Ethnic Groups in Conflict*, 2nd ed., University of California Press, 2001.

Jacob, Marcus and Marcel Tyrell, "The Legacy of Surveillance: an Explanation for Social Capital Erosion and the Persistent Economic Disparity between East and West Germany," *Available at SSRN 1554604*, 2010.

Judson, Ruth A and Ann L Owen, "Estimating dynamic panel data models: a guide for macroeconomists," *Economics letters*, 1999, *65* (1), 9–15.

Kaplan, Ethan and Sharun Mukand, "The Persistence of Political Partisanship: Evidence from 9/11," Working Paper, IIES 2014.

Kelso, N.V. and T. Patterson, "World Urban Areas, LandScan, 1:10 million," Technical Report, Made with Natural Earth 2012.

Kurzban, Robert, John Tooby, and Leda Cosmides, "Can race be erased? Coalitional computation and social categorization," *Proceedings of the National Academy of Sciences*, 2001, *98* (26), 15387–15392.

Lewis, Paul M., *Ethnologue: Languages of the World*, Dallas: SIL International, 2009. 16th ed.

Lowe, Matt, "Types of Contact: A Field Experiment on Collaborative and Adversarial Caste Integration," *Unpublished Manuscript*, 2018.

Madestam, A. and D. Yanagizawa-Drott, "Shaping the Nation: The Effect of Fourth of July on Political Preferences and Behavior in the United States," 2011. University of Zurich.

Mamdani, Mahmood, *When victims become killers: Colonialism, nativism, and the genocide in Rwanda*, Princeton University Press, 2014.

Mehler, Andreas, "Political discourse in football coverage–the cases of Cote d'Ivoire and Ghana," *Soccer & Society*, 2008, *9* (1), 96–110.

Michalopoulos, Stilyanos and Elias Papaioannou, "The Long-Run Effects of the Scramble for Africa," *American Economic Review*, forthcoming.

Miguel, Edward, "Tribe or nation? Nation building and public goods in Kenya versus Tanzania," *World Politics*, 2004, *56* (03), 328–362.

_ **and Mary Kay Gugerty**, "Ethnic diversity, social sanctions, and public goods in Kenya," *Journal of Public Economics*, 2005, *89* (11), 2325–2368.

Miller, D. T. and M. Ross, "Self-serving biases in the attribution of causality: Fact or fiction?," *Psychological Bulletin*, 1975, *82*, 213–225.

Munyo, Ignacio and Martín A Rossi, "Frustration, euphoria, and violent crime," *Journal of Economic Behavior & Organization*, 2013, *89*, 136–142.

Nickell, Stephen, "Biases in dynamic models with fixed effects," *Econometrica*, 1981, pp. 1417–1426.

Nunn, Nathan and Leonard Wantchekon, "The Slave Trade and the Origins of Mistrust in Africa," *American Economic Review*, 2011, *101* (7), 3212–3252.

Paez, Dario, Bernard Rime, Nekane Basabe, Anna Wlodarczyk, and Larraitz Zumeta, "Psychosocial effects of perceived emotional synchrony in collective gatherings," *Journal of Personality and Social Psychology*, 2015, *108* (5), 711–729.

Platow, Michael, Maria Durante, Naeidra Williams, Matthew Garrett, Jarrod Walshe, Steven Cincotta, George Lianos, and Ayla Barutchu, "The Contribution of Sport Fan Social Identity to the Production of Prosocial Behavior," *Group Dynamics: Theory, Research, and Practice*, 06 1999, *3*, 161–169.

Raleigh, Clionadh, Andrew Linke, Håvard Hegre, and Joakim Karlsen, "Introducing ACLED: An Armed Conflict Location and Event Dataset: Special Data Feature," *Journal of Peace Research*, 2010, *47* (5), 651–660.

Ramirez, Francisco O and John Boli, "The political construction of mass schooling: European origins and worldwide institutionalization," *Sociology of education*, 1987, pp. 2–17.

Repucom, "World Football," Technical Report, Nielsen Sports 2014.

Robinson, Amanda Lea, "National versus ethnic identification in Africa: Modernization, colonial legacy, and the origins of territorial nationalism," *World Politics*, 2014, *66* (04), 709–746.

_ , "Nationalism and Inter-Ethnic Trust: Experimental Evidence from an African Border Region," *Comparative Political Studies*, 2016, *49* (14), 1819–1854.

Salehyan, Idean, Cullen S Hendrix, Jesse Hamner, Christina Case, Christopher Linebarger, Emily Stull, and Jennifer Williams, "Social conflict in Africa: A new database," *International Interactions*, 2012, *38* (4), 503–511.

Sambanis, N. and M. Shayo, "Social Identification and Ethnic Conflict," *American Political Science Review*, 2013, *107* (2), 294–325.

Tilly, Charles, "Reflections on the History of European State-Making," in Charles Tilly, ed., *The formation of national states in Western Europe*, Princeton University Press Princeton, 1975, pp. 3–83.

Vidacs, Bea, "Through the prism of sports: why should Africanists study sports?," *Africa Spectrum*, 2006, pp. 331–349.

__ , "Banal nationalism, football, and discourse community in Africa," *Studies in Ethnicity and Nationalism*, 2011, *11* (1), 25–41.

Vigdor, Jacob L, "Interpreting ethnic fragmentation effects," *Economics Letters*, 2002, *75* (2), 271–276.

Vogt, Manuel, Nils-Christian Bormann, Seraina Rüegger, Lars-Erik Cederman, Philipp Hunziker, and Luc Girardin, "Integrating Data on Ethnicity, Geography, and Conflict: The Ethnic Power Relations Data Set Family," *Journal of Conflict Resolution*, 2015, *59* (7), 1327–1342.

Wann, Daniel L., "Understanding the positive social psychological benefits of sport team identification: The team identification-social psychological health model," *Group Dynamics: Theory, Research, and Practice*, 2006, *10* (4), 272–296.

__ **and Thomas J. Dolan**, "Attributions of Highly Identified Sports Spectators," *Journal of Social Psychology*, 1994, *134* (6), 783–792.

Weber, Eugen, *Peasants into Frenchmen: The Modernization of Rural France, 1870-1914*, Stanford University Press, 1976.

West, Brady T. and Annelies G. Blom, "Explaining Interviewer Effects: A Research Synthesis," *Journal of Survey Statistics and Methodology*, 2017, *5* (2), 175–211.

Wucherpfennig, Julian, Nils B. Weidmann, Luc Girardin, Lars-Erik Cederman, and Andreas Wimmer, "Politically Relevant Ethnic Groups across Space and Time: Introducing the GeoEPR Dataset," *Conflict Management and Peace Science*, 2011, *28* (5), 423–437.

Yanagizawa-Drott, David, "Propaganda and conflict: Evidence from the Rwandan genocide," *The Quarterly Journal of Economics*, 2014, *129* (4), 1947–1994.